

Quick guideUltrasound-guided hip arthrocentesis

Arun Nagdev, MDHighland General Hospital
Division of Emergency Ultrasound
Oakland, California

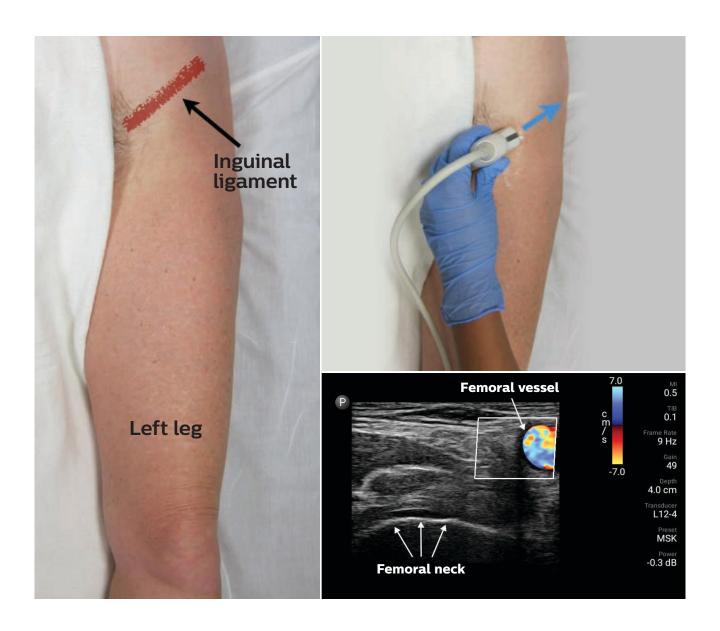
The more you see, the more you can do

Hip pain is a common patient complaint with a broad spectrum of etiologies ranging from the benign, such as osteoarthritis, to the significant, such as septic arthritis. Using point-of-care ultrasound, the emergency physician can evaluate the hip for an effusion and, if necessary, perform ultrasound-guided arthrocentesis for either diagnostic or therapeutic indications.

Ultrasound-guided hip arthrocentesis

Step 1

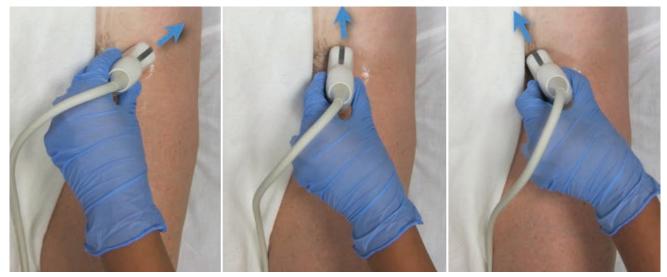
- Use a curvilinear or linear transducer (depending on the size of the patient)
- Transducer orientation marker pointing lateral
- Locate femoral vessels in the near field
- Locate the femoral head/neck in the far field



Ultrasound-guided hip arthrocentesis

Step 2

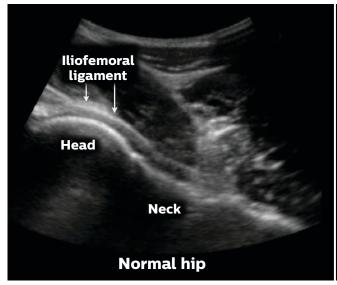
Rotate the transducer orientation marker toward the umbilicus

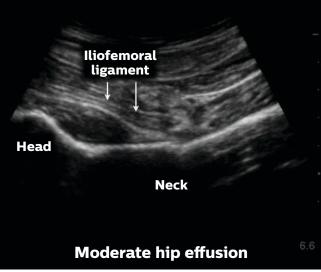


Demonstration of rotation of the transducer on the left leg.

Step 3

- Identify the pertinent anatomical landmarks (femoral head, femoral neck, and illiofemoral ligament)
- Determine the presence of an effusion under the illiofemoral ligament

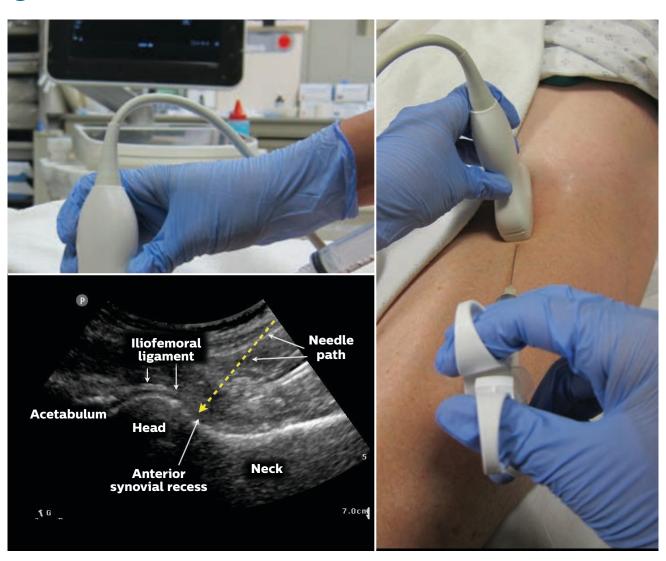




Ultrasound-guided hip arthrocentesis

Step 4

- The procedure should be performed using sterile technique. Note: the photos are for illustrative purposes only and do not reflect sterile technique.
- Position the ultrasound system so the screen is in direct view (contralateral to affected hip)
- Transducer orientation marker toward the umbilicus
- 20-22 g spinal needle attached to a 10 cc syringe
- Use an in-plane needle technique to reach the anterior synovial recess



For additional resources related to **POC ultrasound** visit **www.philips.com/CCEMeducation**

For more information about **Lumify, the Philips app-based ultrasound** system go to: **www.Philips.com/Lumify** or call 1-844-MYLUMIFY

For information about **Philips Sparq ultrasound system** go to **www.philips.com/sparq**

For feedback or comments please contact us at www.ultrasoundeducation@philips.com

This quick guide document reflects the opinion of the author, not Philips. Before performing any clinical procedure, clinicians should obtain the requisite education and training, which may include fellowships, preceptorships, literature reviews, and similar programs. This paper is not intended to be a substitute for these training and education programs, but is rather an illustration of how advanced medical technology is used by clinicians.

